

## REISSUE APPLICATION DECLARATION BY THE INVENTOR

Default Number (Optional)

ATL-130rc

I hereby declare that:

Each inventor's residence, mailing address and citizenship are stated below next to their name.

I believe the inventors named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number 5,706,819 granted January 12, 1998 and for which a reissue patent is sought on the invention entitled ULTRASONIC DIAGNOSTIC IMAGING WITH HARMONIC

## CONTRAST AGENTS

the specification of which

☐ is attached hereto.☒ was filed on January 11, 2006 as reissue application number 09/481,814

and was amended on January 6, 2006  
(if applicable)

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

☐ I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b). Attached is form PTO/SB/07B (or equivalent) listing the foreign applications.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply.)

☐ by reason of a defective specification or drawing.☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.☐ by reason of other errors.

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, such must be stated with an explanation as to the nature of the broadening:

The original patent is wholly or partly inoperative by reason of the patentees claiming less than they had the right to claim in the patent. Original Claims 1-4 are limited to transmitting a first ultrasonic pulse and a second ultrasonic pulse of a different polarity than the first. New Claim 5 calls for transmitting at least three ultrasonic pulses which more broadly exhibit first and second characteristics that cause a reduction in the linear echo response when echoes are combined. Original Claim 1 calls for combining first and second harmonic responses, whereas new Claim 17 calls for accumulating echoes from at least three ultrasonic pulses to produce a nonlinear response. New Claim 20 calls for combining echoes from at least three ultrasonic pulses to produce a nonlinear response, whereas Claim 1 only calls for combining first and second harmonic responses. All original claims are drawn narrowly to detecting the response of a contrast agent, whereas all new claims are more broadly drawn to detecting the nonlinear response of a substance within the body. These errors are being relied upon to support our reissue application. All errors being corrected in this reissue application up to the time of filing of this declaration arose without any deceptive intention on the part of the applicants.

(Page 1 of 2)

This collection of information is required by 37 CFR 1.175. The information is collected to obtain a reissue patent by the patent which is to the text of the USPTO in processing an application. Confidentiality is guaranteed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This application is processed in about 20 minutes to complete an issuing gathering, reviewing, and forwarding the completed application form to the USPTO. There will be any dependent upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1556, Alexandria, VA 22313-1556. DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

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|---|--|---|--|--|--|
| (REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2)   |  |   |  | Docket Number (Optional)<br>ATL-130re            |  |
| All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.  |  |   |  |  |  |
| Note: To appoint a power of attorney, use form PTO/SS-81.   |  |   |  |  |  |
| Correspondence Address: Direct all communications about the application to.   |  |   |  |  |  |
| <input type="checkbox"/> The address associated with Customer Number <span style="float: right; border: 1px solid black; padding: 2px 20px;">28159</span>   |  |   |  |  |  |
| OR  |  |   |  |  |  |
| <input type="checkbox"/> Firm or<br>Individual Name   |  | Philips Intellectual Property & Standards |  |  |  |
| Address   |  | P.O. Box 3001                             |  |  |  |
| City  |  | Briarcliff Manor                          |  | State NY   |  |
| Country   |  | USA                                       |  |  |  |
| Telephone   |  | (425) 487-7152                            |  | Email brint.yorks@philips.com                    |  |
| <b>WARNING:</b>   |  |   |  |  |  |
| Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identify them. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available. |  |   |  |  |  |
| I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application any patent issuing thereon, or any patent to which this declaration is directed.  |  |   |  |  |  |
| Full name of sole or first inventor (given name, family name) <span style="float: right;">Jain-Jai Hwang</span>   |  |   |  |  |  |
| Inventor's signature  |  |   |  | Date <span style="float: right;">11/29/10</span> |  |
| Residence 7432 E. Mercer Way, Mercer Island, WA 98040   |  |   |  | Citizenship United States                        |  |
| Mailing Address <span style="float: right;">same as above</span>  |  |   |  |  |  |
| Full name of second joint inventor (given name, family name) <span style="float: right;">David Hope Simpson</span>  |  |   |  |  |  |
| Inventor's signature  |  |   |  | Date <span style="float: right;">11/22/10</span> |  |
| Residence 23008 14th Place West, Bothell, WA 98021  |  |   |  | Citizenship Canada                               |  |
| Mailing Address <span style="float: right;">same as above</span>  |  |   |  |  |  |
| <input type="checkbox"/> Additional joint inventor or joint representative is/are named on separately numbered sheets (form PTO/SB/CA or CB) attached hereto.   |  |   |  |  |  |